

Amendments to the Claims

Please cancel Claims 1-16 without prejudice to or disclaimer of the subject matter recited therein.

Please add new Claims 17-67 to read as follows.

Claims 1-16 (cancelled)

17. (New) A method producing a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO within the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

18. (New) A method according to Claim 17, wherein said fifth step of washing comprises showering with the pure water.

19. (New) A method according to Claim 17, wherein said fifth step of washing comprises high-pressure showering with the pure water.

20. (New) A method according to Claim 17, wherein said fifth step of washing comprises high-pressure showering with warm pure water.

21. (New) A method according to Claim 17, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

22. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

- a first step of providing the glass sheet with the ITO;
- a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;
- a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and being applied in an oxygen-containing gas atmosphere;
- a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying the glass sheet washed with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.

23. (New) A method according to Claim 22, wherein said fifth step of washing comprises showering with the pure water.

24. (New) A method according to Claim 22, wherein said fifth step of washing comprises high-pressure showering with the pure water.

25. (New) A method according to Claim 22, wherein the fifth step of washing comprises high-pressure showering with warm pure water.

26. (New) A method according to Claim 22, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

27. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying said ultraviolet ray-irradiated glass sheet with said ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

28. (New) A method according to Claim 27, wherein said fifth step of washing comprises showering with the pure water.

29. (New) A method according to Claim 27, wherein said fifth step of washing comprises high-pressure showering with the pure water.

30. (New) A method according to Claim 27, wherein said fifth step of washing comprises high-pressure showering with warm pure water.

31. (New) A method according to Claim 27, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

32. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays including wavelengths of 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying glass sheet washed with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.

33. (New) A method according to Claim 32, wherein said fifth step of washing comprises showering with the pure water.

34. (New) A method according to Claim 32, wherein said fifth step of washing comprises high-pressure showering with the pure water.

35. (New) A method according to Claim 32, wherein said fifth step of washing comprises high-pressure showering with warm pure water.

36. (New) A method according to Claim 32, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

37. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

- a first step of providing the glass sheet with the ITO;
- a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;
- a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

38. (New) A method according to Claim 37, wherein said fifth step of washing comprises showering with the pure water.

39. (New) A method according to Claim 37, wherein said fifth step of washing comprises high-pressure showering with the pure water.

40. (New) A method according to Claim 37, wherein said fifth step of washing comprises high-pressure showering with warm pure water.

41. (New) A method according to Claim 37, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

42. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying the glass sheet washed with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.

43. (New) A method according to Claim 42, wherein said fifth step of washing comprises showering with the pure water.

44. (New) A method according to Claim 42, wherein said fifth step of washing comprises high-pressure showering with the pure water.



45. (New) A method according to Claim 42, wherein said fifth step of washing comprises a step of high-pressure showering with warm pure water.

46. (New) A method according to Claim 42, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

47. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and 253.7 nm and being applied in an oxygen-containing gas atmosphere, whereby the ultraviolet ray-irradiated surface of the glass sheet with the ITO is provided with a wettability with pure water;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO within the wet cleaning unit, said fifth step being commenced within a period in which the wettability with pure water is not lost.

48. (New) A method according to Claim 47, wherein said fifth step of washing comprises showering with the pure water.

49. (New) A method according to Claim 47, wherein said fifth step of washing comprises high-pressure showering with the pure water.

50. (New) A method according to Claim 47, wherein said fifth step of washing comprises high-pressure showering with warm pure water.

51. (New) A method according to Claim 47, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

52. (New) A method according to Claim 47, further comprising:  
a sixth step of conveying the glass sheet washed with the pure water to an air knife unit; and  
a seventh step of draining the pure water by the air knife in the air knife unit.

53. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:  
a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO within the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

54. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiating glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying the glass sheet washed with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.

55. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO within the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

56. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying the glass sheet washed with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.

57. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO within the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

58. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays having wavelengths of 184.9 nm and 253.7 nm and being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying the glass sheet washed with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.

59. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO within the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

60. (New) A method according to Claim 59, wherein said fifth step of washing comprises showering with the pure water.

61. (New) A method according to Claim 59, wherein said fifth step of washing comprises high-pressure showering with the pure water.

62. (New) A method according to Claim 59, wherein said fifth step of washing comprises high-pressure showering with warm pure water.

63. (New) A method according to Claim 59, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

64. (New) A method of producing a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;



a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying the washed glass sheet with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.

65. (New) A method according to Claim 64, wherein said fifth step of washing with the pure water is performed under application of ultrasonic waves.

66. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit; and

a fifth step of washing with the pure water the ultraviolet ray-irradiated glass sheet with the ITO within the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost.

67. (New) A method of producing a liquid crystal device comprising a glass sheet having a surface provided with an ITO, said method comprising:

a first step of providing the glass sheet with the ITO;

a second step of conveying the glass sheet with the ITO to an ultraviolet ray-irradiation unit;

a third step of irradiating with ultraviolet rays the surface of the glass sheet with the ITO within the ultraviolet ray-irradiation unit, the ultraviolet rays being applied in an oxygen-containing gas atmosphere;

a fourth step of conveying the ultraviolet ray-irradiated glass sheet with the ITO to a wet cleaning unit;

a fifth step of washing with pure water the ultraviolet ray-irradiated glass sheet with the ITO in the wet cleaning unit, said fifth step being commenced within a period in which the effect of the ultraviolet ray-irradiation is not lost;

a sixth step of conveying the glass sheet washed with the pure water to an air knife unit; and

a seventh step of draining the pure water by the air knife in the air knife unit.